An Inquiry Learning Based Program For Developing EFL Freshmen’s Writing Performance

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ABSTRACT

The current study investigated the effect of an Inquiry Learning Based Program (ILBP) on EFL students' writing performance. The study followed a quasi-experimental one-group design. The participants of the study were 40 first-year EFL majors at the Faculty of Education, New Valley University during the second semester of the 2020/2021 academic year. A writing performance pre/posttest was prepared by the researcher to measure participants' writing performance before and after the experiment. Before starting, the participants were tested on their writing performance. After conducting the experiment, they were post-tested. A paired samples t-test showed that there was a statistically significant difference between the mean score of the pretest and the posttest in favor of the posttest. This result indicated that the ILBP had a significant impact on developing EFL writing performance. It was recommended that inquiry-based learning be incorporated into EFL college writing courses.

KEYWORDS: Inquiry learning based program, writing performance, EFL freshmen.
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برограм قائم على التعلم الاستقصائي لتنمية الأداء الكتابي لدى الدارسين الجدد للغة الإنجليزية

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المستخلص

هدفت الدراسة الحالية إلى دراسة تأثير برنامج قائم على التعلم الاستقصائي على الأداء الكتابي لدى الدارسين الجدد للغة الإنجليزية كليعة أجنبية. أجريت الدراسة على 40 طالب من طلاب الفرقة الأولى بكلية التربية قسم اللغة الإنجليزية خلال الفصل الدراسي الثاني من العام الجامعي 2020/2021. قامت الباحثة بإعداد اختبار قبلي بعدد لقياس الأداء الكتابي. تم تطبيق الاختبار على المجموعة المشاركة بالدراسة ثم بدأت التجربة والتي استمرت حوالي شهرين، وبعد انتهاء التجربة تم إجراء الاختبار البدني على الطلاب المشاركين. وتحليل نتائج الاختبار القبلي والبدني باستخدام اختبار (ت) لعينتين مترابطتين Paired Sample T-Test. وجدت درجات الاختبار القبلي والبدني للأداء الكتابي لصالح الاختبار البدني. وقد أظهرت نتائج الدراسة أن البرنامج كان له تأثير إيجابي على تطوير الأداء الكتابي لدى الطلاب المشاركين في الدراسة، ولذلك استنتج أن التعلم الاستقصائي كان له تأثير كبير وهم على تطوير الأداء الكتابي لدى طلاب الفرقة الأولى شعبة اللغة الإنجليزية. وفي ضوء هذه النتائج، أوصت الباحثة بضرورة تضمين التعلم الاستقصائي عند تدريس مقرر الكتابة بكلية التربية.

الكلمات المفتاحية: برنامج قائم على التعلم الاستقصائي، الأداء الكتابي، الدارسين الجدد للغة الإنجليزية كليعة أجنبية.
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I. INTRODUCTION

Writing performance has always been of a prominent role for EFL students. It is not merely a simple mechanical skill, rather it encapsulates a body of cognitive skills which support the academic development of learners and make them more creative and innovative in their perception of language. Among the various benefits of writing are the following: 1) it is a primary mechanism for self-expression, communication, and self-reflection, 2) it is a major keystone on which content knowledge is built, and 3) it mirrors students’ literacy development (Almelhi, 2021; Hosseini et al., 2013). Moreover, Setyowati et al. (2021) explained that for a preponderance of EFL majors, nothing is more essential in college than developing a quite good writing performance, since their GPA is directly affected by how good they write on their test papers. For numerous EFL majors, especially university students, the need to develop their writing performance changes from an important aim to a top high-priority persistent target in case they truly care not only about their GPA but also about their life-long careers after college. Therefore, Yousefifard and Fathi (2021) assured that the same importance and care devoted to other different content courses should also be given to developing the writing performance of EFL students.

Despite the significance of the writing performance for EFL students and the various efforts to employ modern approaches to
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enhance it, many EFL majors in the universities context were reported to have such problems in writing as a) inability to compose a complete essay that is clear and well organized, b) writing short paragraphs due to having limited ideas about the assigned topic, c) invading the unity of ideas and inclusion of irrelevant information, d) breaking the coherence which hinders the flow of thoughts causing a serious distraction for readers, e) failure in communicating thoughts in a written form in an accurate manner, f) inability to build connections with the target readers, g) linguistic error including errors in spelling, punctuation, and grammar (Abu elmagd, 2006; Abo Zaid, 2019; Al-Rashidy, 2018; Alshamy, 2018; Badawi, 2016; Bahgat, 2014; Eldesouky, 2018; Elhenawy, 2012; ELkuly, 2016; Mansour, 2015; Nada, 2010; Seiffedin & El-Sakka, 2017; Zaki, 2016). Proceeding with the same context of detecting the poor writing performance of EFL learners, the researcher of the current study who while working as a demonstrator at the curriculum and instruction department (TEFL), New-Valley Faculty of Education, noticed the poor writing performance of first-year EFL majors which was manifested in the following points: difficulties in structuring essays in sound coherent paragraphs, as well as difficulties in developing the main idea in a sequential manner; not to mention many linguistic errors in the final written output. In order to precisely assess students’ writing performance, the researcher conducted a pilot study (writing performance test) on (20) students of the first year EFL majors and the results indicated the weakness of the writing performance of EFL freshmen. The result of the pilot study that ensured the weak writing performance of EFL students is consistent with what previously was reported in studies conducted in the scope of EFL writing performance (Alafify, 2021; Desoky, 2021; El Sakka, 2020; El Sakka et al., 2011; Noureldeen, 2021). A common possible reason for such low writing performance was referred to in these studies as is the traditional teaching strategies employed in the writing courses which as depicted by EL Sakka (2020) are limited to...
merely appointing random writing topics as homework with no tangible guidance provided to students.

According to Hasan and Akhand (2010), pedagogical specialists are favoring modern educational approaches that address and develop students’ performances rather than the traditional approaches that are teacher-centered. Consequently, employing approaches that are more student-centered and promote the focus on the performances and activities practiced by students in several stages at which students become active and in charge of their learning experience is needed. In the current study, the researcher proposed an inquiry learning-based program for developing EFL freshmen’s writing performance.

The bottom line is that designing students’ learning experience in the university context to be alike a researchers’ experience is a high priority demand in today’s world of inventory and those who enjoy a good command of writing are more likely to be in the lead (Fachinger et al., 2011). Therefore, In EFL writing classes, instructors need to employ instructional approaches which address students’ curiosity, stimulate investigation about required info’s, foster students’ analytical abilities, make students active participants, and focus more on the processes of developing a piece of writing rather than the focus on the end product. In the present study, the researcher proposes an inquiry learning-based program for developing EFL freshmen’s writing performance. As far as the researcher is concerned, employing Inquiry-Based Learning (IBL) in subjects such as science is common, yet, linking (IBL) to the field of EFL, especially in the scope of EFL writing instruction is a recent trend. That research scope is in need of further research to have it conveniently covered in the field of EFL research.

II. PROBLEM STATEMENT

The problem of the present study is stated as there is weakness in the writing performance of EFL freshmen at the Faculty of Education, New-Valley University. Therefore, an Inquiry Learning-
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Based Program (ILBP) is proposed for developing EFL freshmen’s writing performance.

The current study attempted to answer the main question which is "What is the effect of an Inquiry-learning based program on the writing performance of EFL freshmen."

Some sub-questions lie from the main study question as follows:
1. What are the features of an Inquiry-Learning Based program for improving the writing performance skills of EFL freshmen?
2. To what extent the proposed program is effective in developing the writing performance of EFL freshmen?

AIMS OF THE STUDY

The present study aimed at:
1. Preparing an inquiry learning-based program that offers a learning environment enriched with clear, applicable, and activating inquiry tasks of (orientation, conceptualization, investigation, conclusion, and discussion) to develop the writing performance of EFL freshmen which in turn trains EFL majors to be more independent learners.
2. Measuring the effectiveness of an inquiry learning-based program to develop the writing performance of EFL freshmen.

III. SIGNIFICANCE OF THE STUDY

The current study is supposed to be significant for:
1. EFL curriculum developers: the proposed inquiry learning-based program can be included in EFL writing courses to keep them up-to-date with the latest pedagogical trend that is proven to effectively enhance EFL students’ writing performance.
2. EFL instructors: encouraging instructors to employ a modern instructional methodology in writing via a proposed program with clear instructional steps and various activities which help teachers lead a more active and creative writing class.
3. EFL students: the (ILBP) is supposed to train EFL freshmen to employ inquiry steps that are similar to those of a researcher to construct sound pieces of written texts in a boredom-free writing
class where students become more active and carry more responsibility for their learning.

I.V DELIMITATIONS OF THE STUDY
The current study was delimited to the following:
1. Forty first-year EFL majors at Faculty of Education, New-Valley University.
2. The second semester of the academic year 2020/2021.
3. The following writing performance skills: (Structure, Audience Awareness, Voice, Coherence, and Accuracy)

V. DEFINITION OF TERMS
INQUIRY LEARNING BASED PROGRAM (ILBP)
Inquiry learning based program was operationally defined by the researcher as a learning program devoted to developing the writing performance of first-year EFL majors at the faculty of Education, New Valley University by immersing participants in the various inquiry activities of orientation, conceptualization, investigation, conclusion, and communication at which students work collaboratively in a recursive manner to achieve the established learning objectives.

WRITING PERFORMANCE
Writing performance was operationally defined by the researcher as the process of composing essays in which the writer’s awareness of a target audience is developed, the voice of the writer is credibly presented throughout well-structured paragraphs in which coherence and accuracy are evidenced.

VI. LITERATURE REVIEW
1. INQUIRY-BASED LEARNING
On a universal level, the standards of a wide range of educational organizations are evolving from mastering a set of discrete skills to performing broad learning performances. Those performances are frequently referred to as twenty-first-century learning skills. In response to this evolution, the field of pedagogy is witnessing a shift from teacher-centered and content-centered learning situations to students’ construction of knowledge-centered learning situations. In
this educational setting, learners employ a variety of resources to work in partnership with others to solve authentic problems. In addition, Jansen (2011) explained that educational institutions, universities, in particular, are adopting new pedagogies to keep up with the vast changing social demands. They have responded to students’ persistent need to excel in skills and abilities which will benefit them across various disciplines and life-long careers. Both students and university scholars know well that the work field nowadays offers job opportunities only for those who excel in such skills as analyzing and inquiring issues, solving problems, thinking critically, taking leadership, and communicating effectively. According to Tapscott and Kaplan (2019) “In this new world, it’s not just what you know that counts—it’s your capacity to think and learn throughout your life, communicate, and above all, collaborate” (p. 18). These demands are pushing universities to experiment with new pedagogies. While the scope of the new learning approaches being tried is quite varied and wide, many educational institutions are focusing on infusing the inquiry-based learning approach within their existing programs. Furthermore, the inquiry-based learning approach is one approach that meets the requirements of the recent educational evolution since it offers a more student-centered and interactive learning method while concentrating on knowledge construction i.e., learning how to learn (Justice et al., 2009).

According to a study by Garrison (2013), inquiry-based learning started and widely spread as a preferred approach in a way that copes with the vast and rapidly changing world of technology and science. Yet, the inquiry approach lies under the umbrella of the constructivism theory. Amineh and Asl (2015) assured that the theory of constructivism has become popular in the field of education recently. Constructivism is touted as an approach synthesizing multiple theories diffused into its scope. Its multiple roots in philosophy and psychology relate to Jerome Bruner’s cognitive psychology and his description of discovery learning.
Piaget’s constructivist views (1967), and Lev Vygotsky’s social-cultural constructivism (1986). Nevertheless, the core stance of constructivism is mainly that learning is a process of meaning construction. Gül et al. (2012) explained that in Bruner’s perspective learners’ formation of new ideas and understanding depends on their present knowledge. The learner, in this perspective of constructivism, chooses data, develops hypotheses, and reaches decisions intending to incorporate new experiences into his current experience and knowledge. Learners’ independence is at the center of efficient education and this independence can be enhanced when learners attempt to explore new principles by themselves. Regarding Piaget’s cognitive perspective, Yilmaz (2008) illustrated that learning is not received passively; rather it occurs due to learners’ active meaning construction. learners rationalize new information by attempting to assimilate them into the existing/prior knowledge. When assimilation can’t be done, the learners resort to accommodation that is; restructuring the current knowledge to higher thinking. Vygotsky’s core perspective was referred to at Mvududu and Theil-Burgess (2012) who explained that the process of learning depends on social interaction and is mediated in community and culture. This can be illustrated by simply pointing out that knowledge construction requires making sense of others and relating to the surroundings and circumstances. Accordingly, for the purpose of reaching an understanding of humans’ thinking and construction of knowledge, an understanding of their social experience is inevitable.

Furthermore, Pritchard (2017) summarized the significant features of the constructivist theory of learning in the following points: 1) It is essential to construct knowledge and not to reproduce it, 2) the processes which the learner implements and utilizes are what really counts, rather than knowing something as a final product, 3) the learner is actively involved in the learning process and is in control of it, 4) multiple representations of reality can result from learning, 5) when learning requires using a range of resources (e.g., first-hand experience, interactive materials,
secondary sources, independent research, dialogue), alternative opinions of the matter in question are formed and this results in promoting the critical thinking abilities, 6) authentic tasks situated in meaningful realistic contexts are encouraged in the learning context, and 7) reflection on prior experience, collaborative tasks, and autonomous learning are essential elements of the learning experience. To conclude, the IBL approach and the approaches that are derived from the theory of constructivism ought to immerse the above-mentioned features within the design of the learning experience they offer in order to make the learning experience beneficial for learners.

students who are engaged in inquiry learning-based experiences enjoy various benefits. Perdana and Atmojo (2019) further illustrated some of the benefits which learners gain when employing IBL as follows. Inquiry-based learning helps students develop the skills of critical thinking and problem solving by engaging learners in activities that are synced with the scientific method adopted by scientists when they study the world surrounding them. It provides learners with opportunities to observe a phenomenon in detail, formulate inquiry questions and hypotheses to be tested and investigated, plan and design their investigations as well as test and evaluate pieces of evidence in order to come out with sound answers to the inquiry questions they posed. In addition, The National Research Council (NRC, 2000) further added that learners participating in classrooms adopting inquiry as a pedagogical approach: (a) enjoy a meaningful learning experience through scientifically oriented research questions, (b) prioritize sound evidence, (c) deduce explanations based on evidence, (d) evaluate and measure explanations in light of alternative explanations, and (e) communicate and justify proposed inquiry outcomes. To put it differently, inquiry learning refers to an active learning process in which students do inquiry tasks rather than having tasks done for them (Abell & Hanuscin, 2013). In line with this point, in the inquiry learning process students: 1) take responsibility for their learning, 2)
formulate good questions to investigate an issue, 3) determine the required information, 4) evaluate sources and data critically, 5) synthesize a coherent whole, and the final product effectively (Thomas et al., 2016).

In the inquiry setting, teachers’ roles and responsibilities totally differ from the common roles which teachers used to practice in the traditional teaching setting. This is illustrated by Xu and Shi (2018) who pointed out that teachers’ core role is to become constant supporters for students who undertake the process of knowledge construction. Unlike the traditional teaching practices, teachers’ role evolves to take the form of being facilitators & collaborators for students. Also, teachers need to take into consideration that a sound teaching practice is one that achieves balance by gradually decreasing exterior control while increasing internal students’ self-control at the same time. Subsequently, teachers start to activate collaborative learning, communication, and discussion, making all students active participators in the process of the construction of knowledge. Moreover, Bada and Olusegun (2015) listed some teaching principles in inquiry-based learning as follows: 1) teachers cannot tackle the intellect alone since learning entails the whole physiology, 2) teaching must be multifaceted to meet students’ different needs, 3) the quest for meaning is innate and occurs through patterning, 4) teachers start to take into consideration different learning styles since every brain is unique, 5) while teaching, teachers need to develop a balance between focused attention and peripheral perception, 6) employ activities that help with embedding facts and skills in natural spatial memory in order to help students understand and remember best, 7) employ experiential learning tasks to make learning meaningful for students and most effective, and 8) create challenging and non-threatening experience for students to enhance the learning experience.

Regarding the quality of the learning environment in inquiry learning-based classes, Wang (2014) pointed out that learning should be offered at a place where learners can freely explore and independently learn. This way, learners can use multiple
instruments and data resources to accomplish their final learning objectives (including texts, video clips, audio records, CAI, multimedia materials, web-searching). In short, teaching can be explained as follows: educators play the role of mentor, organizer, facilitator, and helper in the course of the entire learning process while learners are placed at the center of this process. Situated learning, collaboration, and discussion are used as components of the teaching setting to fully boost students’ enthusiasm and pioneering spirit.

2. THE CYCLIC INQUIRY MODEL (Pedaste et al., 2015)

The educational literature depicts a variety of inquiry cycles. Comparative analysis of these cycles has been conducted by Pedaste and his research team (The European Union funded them in the context of the GO-Lab project) involved amassing definitions of the inquiry phases, determining their placement in the cycle, and excluding redundancy between phases. This helped spot the most common inquiry phases, fuse multiple sub-processes, and form bigger modules. Overall, the framework brings together and connects the basic elements of inquiry cycles to illustrate the idea that multiple implementations of inquiry cycles can develop out of a single framework. The resulted inquiry cycle consists of five main phases along with a number of sub-phases infused in them (Pedaste et al., 2015).

The cycle begins with the orientation phase where learners’ curiosity regarding a particular issue is highly stimulated which triggers learners to begin careful observations to determine the main variables and relevant perspectives. When learners eventually come up with a sound problem statement, they are ready to move to the next phase of conceptualization where learners begin to make the concepts related to the issue meaningful via going through the two sub-phases of (questioning and hypotheses generation) which will be investigated and tested for their validity and credibility. Once this task is done, learners can move up to the next phase of the investigation. The investigation phase includes the sub-phase of
exploration where learners plan for a systematic data generation that can be used to respond to the research questions, then, in the sub-phase of experimentation learners design and follow a procedural protocol to collect target data from ethical sources. Then follows the data interpretation sub-phase where the collected data are filtered and organized to synthesize meaningful knowledge that serves the assigned inquiry targets. When these tasks are accomplished, learners move up to the phase of conclusion where learners address the stated questions and hypotheses to ae decisions whether they are properly answered through fruitful discussions with their mates. In the discussion phase, learners communicate their findings to other participants and make edits based on the feedback they receive. Also, learners need to accomplish the second sub-phase of reflection where learners reflect on their inquiry performance during each and every inquiry phase. All the phases of this cycle are not arranged in chronicle order, rather they are of recursive nature i.e., learners can take pathways and go back and force multiple times in accordance with their needs (Mayer & Alexander, 2016; Rönnebeck et al., 2016; Prodromou, 2019).

According to Kong and Abelson (2019) this cycle doesn’t contradict or drop off the other inquiry cycles progressed in the educational research, rather it employs all strength points and core inquiry components existing in the former models to be the foundation of this cycle where redundancies among phases are successfully eliminated. In the same regard, Zacharia et al., (2015) further illustrated that this model enhances both inductive and deductive reasoning via its various activities. Also, this model, unlike former models, enjoys an interaction between transformative and regulative processes. It clearly clarifies the input, action, and output of each phase which lessens any confusion that may be encountered by either teachers or students. It covers the different inquiry levels starting with the structured to the open inquiry level. This can be customized in accordance with the needs of the learners, the learning objectives, and the requirements of the assigned tasks.
This model can be applied in both traditional and virtual learning environments.

**WRITING PERFORMANCE**

The performance of writing as asserted by Negari (2011) is a complicated process that includes some cognitive and metacognitive activities, such as brainstorming, planning, outlining, organizing then drafting, and revising. Writing therefore is best viewed as a continuum of activities. Tuan (2010) further explained that writing performance is occasionally perceived by EFL learners as challenging. One reason for students’ attitude about writing is the fact that they need to focus on multiple key-success factors at a time before they are able to present a coherent, sound, extended written piece. These factors include (decoding their ideas into a written product, considering the linguistic features of the intended writing style, the tenor or target audience, presenting a strong voice, and using sound language). According to Bukhari (2016) when it comes to writing a number of desired factors need to be considered such as organizing the thoughts, creating a systematic connection with pertinent details to structure the thoughts, and expressing opinions cohesively and coherently so as to make all the ideas linked to the main theme. In line with the same point, McKenna (2015) pointed out that as learners get ready to engage in a writing activity, they need to think about which genre they are approaching in order to get a clear idea concerning the main purpose of their composition, the suitable structure to use and the proper style they can employ. Furthermore, Anastasiadou (2010) illustrated that writing is challenging for learners. since it is more than merely transcribing thoughts into written symbols. It requires mastery and integration of other skills such as planning, problem-solving, and decision making. In a more detailed manner (Yu & Reynolds, 2018) added to those skills some other skills including the ability to: write vivid descriptions, express opinions and attitudes clearly, negotiate meanings and interpret information and diagrams of texts in their own written production. Also, it isn’t a linear process but is of a
recursive nature. To conclude, as Putri (2018) illustrated improving the writing performance is inevitable for EFL learners’ academic and life-learning quests. Hence, the key question is: How can faculty instructors teach EFL students to become effective writers/communicators in a short amount of time? (Defazio et al., 2010).

VII. Recent Research

On reviewing the relevant literature, a number of recent studies reported inquiry-based learning to be effective for improving the writing performance of EFL students. For instance, Palupi et al. (2020) conducted a study on 162 fifth-grade students to compare whether the guided inquiry or problem-based learning is more effective for developing explanatory writing skills. Palupi et al stated that the educational research field includes many studies which administered guided inquiry on specific subjects such as science and other studies that compared the inquiry-based learning to the traditional learning model, still, no studies compared the effect of both models (guided inquiry and problem-based learning) on the explanatory writing skills. In this study, the researchers used one-way ANOVA analyses to measure students’ scores on the explanatory writing skills test. The findings indicated that guided inquiry is more effective than problem-based learning in developing students’ explanatory writing skills and the explanation for such result was that students in the primary grade still need careful guidance from teachers while composing explanatory texts. Thus, the guided inquiry which stresses teachers’ guidance is more effective for developing the fifth graders’ explanatory writing skills than problem-based learning which stresses the skills of problem-solving. Furthermore, Sigman (2019) conducted action research in order to study the effect of project-based learning, derived from inquiry-based learning, on college students’ skills of writing, communication, and interpersonal skills. The study instruments included a pre-post writing test, observational checklist, interviews, and projects assessment. The findings of the study indicated that
students’ writing in terms of structure, grammar, language, and content) communication and interpersonal skills were developed. Furthermore, the researcher suggested adopting the proposed action plan to provide extra training for faculty students to assess them to achieve success in different faculty courses.

In the same context, Tikruni (2019) conducted a qualitative case study in a public university in Saudi Arabia for investigating the effect of inquiry-based learning intervention on first-year EFL students’ critical thinking in reading and writing. The study sample included a number of 35 students (women) who participated in the pre-posttest of reflective essays. Also, six out of the thirty-five were interviewed in order to determine the effect of the inquiry intervention on the participants’ critical thinking. Coding and textual analysis were used to analyze the data. Findings of the study indicated that participants’ reflective essay writing was developed in terms of (structure, personalized content, plagiarism, organization, using transitions and academic words) and the critical thinking skills of the participants were also developed as manifested in their responses within the conducted interviews. Also, Dickinson (2015) conducted a case study to determine the extent to which inquiry-based instructional strategies influenced the closing of the achievement gap in reading and writing at the high school level. In the academic year, 2013-2014 the teachers employed inquiry-based learning as their instructional approach and they all were committed to the core inquiry practices such as using questioning as a primary technique, asking students to always justify their thinking, asking students to question their peers’ thinking. The data analyses in this study included students’ scores in the Washington State High School Proficiency Exam (HSPE) in the academic year 2013 and 2014. The analyses revealed a strong correlation between teachers’ inquiry-based instructional practices and the closing of students’ achievement gap in reading and writing as deduced from students’ scores on the Washington HSPE test. That is to say, inquiry-based
learning positively influenced students’ achievement in reading and writing to a great extent.

Moreover, Norton-Meier et al. (2013) presented a model integrating the inquiry-based science instruction with literacy instruction and within the administration of the proposed model participated a number of 32 teachers and more than 700 students in the preparatory stage. The researchers found out that the model was effective in enhancing students’ science writing heuristic skills. The researchers recommended two essential key success factors on the basis of the data analyses: 1) instructors need to adopt a community of inquiry-based learning environments that enhance social learning and 2) educational institutions need to adopt cross-disciplinary courses that are necessary for coping with the demands of the 21st century. In his study Federici (2011) administered a proposed inquiry-based program on second-year university advanced L2 students. The suggested program placed students’ inquiry at the center of the writing course with an extra focus on self-assessment and feedback. The program included 11 sessions at which the participants were mirroring the research/inquiry process in their learning experience. Eventually, the findings of this study indicated that the proposed inquiry learning-based program was effective in developing students’ ability to express themselves in a written form more confidently. It is worth mentioning that, all the previously stated studies recommended conducting more research on a more extended scope in order to further investigate the effect of IBL on developing EFL majors’ writing performance of the different writing genres and further writing sub-skills which in turn would provide more empirical data that fills the research gap regarding this scope.

VIII. HYPOTHESIS OF THE STUDY:

The following hypothesis was proposed in order to investigate the questions of this study:

There would be no statistically significant difference in the participants' scores on the pretest and the posttest of writing performance.
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X. METHOD

1. DESIGN

While the method adopted in the present study is the quasi-experimental method, the design employed is the one-group Pre/Posttest design. In this design, the participants of this study were asked to compose essays adopting the casual technique of writing (pre-tested). Then the participants went through the different procedures of the treatment (ILBP inquiry learning-based program). Eventually, they would be asked to rewrite on the same prompts (post-tested). The participants’ production (differences in mean scores between the pre & the post-test) was analyzed, assessed, and compared using SPSS 25.

2. Setting

The present study was implemented in New-Valley University, Faculty of Education, during the academic year 2020-2021. The researcher conducted an inquiry learning-based program on EFL freshmen enrolled in the course (Writing 1) in order to develop their writing performance.

3. PARTICIPANTS

The participants in this study were (40) students. They were EFL freshmen enrolled in the course (writing 1), in the English department, at the faculty of Education, New Valley University in the second semester of the academic year 2020/2021. The age of the participants ranged from 17 to 18 years old, and they spent at least 12 years learning EFL and writing has been included within the curriculum taught to those participants during these years. Accordingly, they can be considered a purposive group for achieving the aims of the current study.

4. The Inquiry Learning-Based Program (ILBP)

In the present study, the researcher developed a program based on the IBL approach, particularly on the cyclic model of Pedaste and his research team (Their research project was funded by The European Union in the context of the GO-Lab project) in order to
develop the writing performance of EFL first-year majors. The aim of such a model is to generate an inquiry-based learning framework that synesis and merges the core inquiry steps. Such a tangible model can be easily employed by both instructors and learners in the educational context. The generation of such a model resulted due to a systematic review of the various researches that depicted the steps of inquiry-based learning. The (ILBP) consists of the following phases: Orientation, Conceptualization, Investigation, Conclusion, and Discussion) as follows:

A. Orientation

An orientation activity on the assigned topic is presented to the participants, which can either be a short video clip, photos, caricature photos, a short report on a famous news channel’s online website, or a short reading text displayed on the data show. Then, students are to be asked to respond individually to some observational questions or notes regarding the assigned topic, then they participate in brief discussions with the groups about their responses. Doing so, the participants start to explore or observe the topic which in turn helps them identify the main variables of the topic and recognize the inquiry anchor. Next, the researcher should divide the participants into groups of five through the random picking cards technique. The main aims of this phase are to 1) motivate participants about the assigned writing topics, 2) guide students to primarily identify the facets of the topic, 3) ensure that participants determined their position regarding the writing topic.

B. Conceptualization

This phase consists of the two sub-phases of (Questioning and hypotheses generation) to help them recognize and comprehend the concepts related to the topic on hand. Participants in the different groups were handed aids (designed by the researcher) such as research questions focusing charts, C.P.S.F.A.H sheets, P.R.I.C.E guiding charts, hypotheses formulation templates, mind maps, working knowledge planner charts, and checklists for refining the developed RQs & RHs. In the process of developing research questions, participants start to construct such actual questions they
may ask themselves about the proposed topic in order to discover more about it. This gives the participants an angle to approach the topic in such a clear and concise way which helps with streamlining the essays. Also, as participants begin to formulate their research hypotheses (RH), they encapsulate predictions they suppose concerning the expected connections among variables of the assigned topic which are a set of highly probable propositions suggested in the light of established facts. That is to say, they draw hypotheses that 1) describe the reasons, factors, and different responses concerning the assigned topic, 2) precisely determine the relevant variables, 3) predict differences and similarities of views, 4) are centered on the description of the topic.

C. Investigation

In the investigation phase, participants’ curiosity is turned into actions in order to address the stated research questions/hypotheses and to respond to them. Participants are engaged in tasks aimed to make them: plan for systematic data investigation/collection on the basis of the stated research question, conduct an inquiry schema, and develop interpretations out of the collected data. In order to conduct those tasks properly, the researcher provides the participants in the different groups with aids (prepared by the researcher) including action plan templates, inquiry schemas, Cornell sheets, data-analysis organizers, colored cards, and name tags. In other words, the main aims of this phase are to 1) guide the participants to conduct an action plan to organize the searching process, 2) analyze the collected data and make meaning of them.

D. Conclusion

At this point, participants move to the process of transferring their final conclusion about the findings of their inquiry responding to the research questions/hypotheses into drafts of their essays. Once participants accomplish the main targets of this stage (drawing conclusions and making judgments, phrasing their findings in sound essays), they can proceed to the next phase of discussion.

E. Discussion
On reaching this phase, the researcher gives the groups some guiding aids including (essay checklists and inquiry-process checklists) to help the participants in the groups assess the performance of their writing and of their inquiry as well, then, the researcher allows for discussions (peers, instructor) among the different groups to get and respond to the feed-backs. This activity is followed by a reflection task where the researcher gives each participant a reflection journal sheet and asks the participants to respond to it individually.

5. INSTRUMENT

A pre-post writing performance test (WPT) was developed by the researcher to measure the writing performance of first-year EFL majors. The test consisted of a composition-writing task. In this task, four topics were offered to the students to choose two to write an essay on each. Each essay should contain, at least, 6 paragraphs. The selected topics were chosen for their relevance to the current ongoing global events and for their relevance to the students’ interests. The test was submitted to eleven TEFL specialists to ensure its validity. The jury members assessed the test to be valid for achieving the study aims and suggested no extra edits to be made. The test was piloted on 20 first-year EFL majors, out of the study sample. The purpose of piloting was to ensure the clarity of the WPT and to calculate the time required for completing the test. On calculating Pearson’s coefficient of correlation between the scores of 20 first-year EFL majors on WPT, the construct validity of the test was checked. There was a positive correlation between the value of each skill in the test and the total score of the test ranged between (0.511-0.723) at the level of (0.01), thus, all the skills are strongly correlated with the test. Test-Retest Reliability was employed to calculate the reliability for the WPT. Two administrations (test-retest) were conducted with a 14-day lapse. Pearson correlation coefficient yielded 0.864 which was significant at the 0.01 level.

A scoring rubric, developed by the researcher, was used to evaluate the answers of the students to the writing performance test.
In this rubric, a total of 25 marks was evenly divided among five main components (structure, audience awareness, voice, coherence, and accuracy). Each component had 5 levels (Exemplary= 5 marks, Competent=4 marks, Adequate=3 marks, Inadequate=2 marks, fundamentally deficient=1 mark). It should be noted that the researcher conducted a training session for other raters about how to use the scoring rubric. Alike the WPT, this rubric was submitted to jury members for validation and again the jury members assessed the rubric to be valid for achieving the aims of the study with no suggestions for any required modifications. For the reliability of the scoring rubric, the inter-rater reliability was conducted. In this connection, the pilot sample students’ answers (N=20) to the pilot test were corrected by three raters using the scoring rubric. Pearson correlation coefficient between Rater 1 and Rater 2 was (0.768), between Rater 1 and Rater 3 was (0.888), and between Rater 2 and Rater 3 was (0.859) that are all statistically significant at 0.01. In addition to that, the One-Way Analysis of Variance (ANOVA) was calculated as well. The results revealed that there were no statistically significant differences among them (F = 0.826, sig. = 0.478, p > 0.05).

6. PROCEDURES

In the current study, the experimental procedures were conducted during the second semester of the 2020-2021 academic year. For the purpose of piloting the instruments of the study, the researcher randomly chose a number of 20 out of a total of 63 first-year EFL major students at the faculty of Education, New Valley University. Once the piloting was successfully conducted, 40 EFL students (with the exclusion of the 20 who participated in the pilot) were chosen to participate in the experiment. The procedures of the current study included the following four stages 1) pretesting, 2) setting the scene, 3) implementing the ILBP, 4) post-testing.

A. Pretesting

Along with the beginning of the second semester of the 2020-2021 academic year, the researcher randomly chose a number of 40
EFL students (with the exclusion of the 20 who participated in the pilot) to participate in the experiment. Before being exposed to the ILBP, the 40 participants were pretested in the writing performance test that was developed by the researcher.

B. SETTING THE SCENE
Before the administration of the ILBP program, the researcher conducted an orientation session of two parts, each lasted for approximately 110 minutes with a 10 to 15 minutes break between the two parts. The aim of the first part of the orientation session was to introduce to students the basic components of a good essay (the structure, a detailed outline presenting basic elements and characteristics, some traits that need to exist in a well-developed essay). Students were given a 10 minutes break to regain their focus and to be able to proceed to the second part. The aim of the second part of the orientation session was to introduce the stages of the IBL and to get students familiar with the different activities which they would encounter in the following sessions with an extra explanation of their expected roles during these activities. Also, the researcher explained how the participants would work in cooperative groups by giving brief oral descriptions of the roles of the Time-keeper, the Questioner, and the Reporter. Another important aim of this part of the orientation session was to introduce some basic tips on how to make participants’ search on the web more efficient. At last, students were introduced to the ILBP’s schedule, rules, and procedures.

C. IMPLEMENTING THE ILBP
The study participants were exposed to the ILBP once a week during the second semester of the 2020-2021 academic year. The participants implemented the phases of ILBP, as explained earlier, as they participated in the writing sessions as follows:

session one covered the first main skill of Structure and the relevant four sub-skills derived from it. The session targeted developing a structure that presents a strong and thoughtful position and offers fluent persuasive support. It is focused and well
organized into: (introduction, 3 body paragraphs persuasively support the claim with fully elaborated evidence and reasons, a refutation efficiently refutes the opposing views and a conclusion fully summarizes the ideas of the whole essay) with effective transitions.

Participants, then, proceeded to sessions two and three that revolved around the main skill of Audience awareness along with the sub-skills that fall under it. The sessions’ content was intended to make Students’ essays show strong acknowledgment and recognition of the audience’s values, needs, and expectations which helps develop mutual respect and connection to orient the audience while various appeals and figurative devices should be employed to engage and sway the audience.

Next in the row was session four which dealt with the main skill of Voice and other relevant derived sub-skills. This session focused on helping students develop a credible and strongly-presented voice through addressing the audience directly, using stances and engagement devices, providing sufficient information, and citing all the used sources correctly. After that, participants were engaged in session five that handled the main skill of Coherence and its derived sub-skills. The session stresses the coherent order of the paragraphs which should be linked to the thesis statement while excluding any irrelevant ideas.

Eventually, participants reached session six which covered the skill of Accuracy. It dealt with grammar, spelling, punctuation, and word choice.

D. Post testing

The writing performance test was administered to the participants at the end of the experiment. With the use of SPSS 25, statistical analyses were performed.

XI. RESULT

The researcher utilized a dependent sample t-test to compare participants’ mean scores in the pretest and the posttest of writing performance. This dependent t-test revealed a statistically
significant difference (t=143.334, p<0.05), in favor of the posttest. Additionally, the calculated effect size (d=24.23) is interpreted large based on Ellis (2010) who illustrated that a large effect size corresponds to a range of 0.8 or more.

Table 1: Paired samples t-test of the study participants’ overall writing performance (df = 39)

<table>
<thead>
<tr>
<th>Writing performance</th>
<th>Mean</th>
<th>SD</th>
<th>Paired Differences</th>
<th>T</th>
<th>Sig.</th>
<th>D</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>14.73</td>
<td>.877</td>
<td>Mean</td>
<td>143.334</td>
<td>0.01</td>
<td>24.23</td>
<td>.986</td>
</tr>
<tr>
<td>Posttest</td>
<td>35.13</td>
<td>1.471</td>
<td>20.400</td>
<td>.900</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**XII. DISCUSSION**

To achieve the aim of the present study, a main null hypothesis was developed related to the writing performance, “There would be no statistically significant difference in the participants' mean scores between the pretest and the posttest of writing performance test”. In order to test this hypothesis, the researcher utilized a dependent sample t-test to compare participants’ mean scores in the pretest and the posttest of writing performance. This dependent t-test revealed a statistically significant difference (t=143.334, p<0.05), in favor of the posttest. Additionally, the calculated effect size reached (d=24.23) which can be regarded large effect size based on Ellis’s (2010) illustration that an effect size that corresponds to a range of 0.8 or more is large effect size. This result reflected that the study participants have achieved significant improvement in their writing performance during the experiment period. Accordingly, the hypothesis of the current study was completely rejected. One possible explanation for this significant finding can be the use of conceptualization and investigation-based activities as essential steps in crafting the required essays. This is assured by Wale and Bogale (2021) who point out that these activities help students develop needs’ analyses and plan for data-exploration in order to collect, then, interpret the data required for convincing the readers of the writer’s claim and for refuting the opponent views. This is also confirmed by Cam (2006) who argues that the finest solution to
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students’ writing problems is the inquiry-based learning activities which include developing the right questions, exploring, investigating, and cooperating in evaluating answers to reach the best solutions.

A second explanation is attributed to the various ongoing feedback (instructor, peer, and self). This is consistent with Çavdar and Doe’s (2012) contention that IBL encourages students to evaluate their own work and the work of others as well which creates a tangible chance for students to re-engage with their work and eventually enhance their writing performance. A third explanation comes down to the sense of authenticity when students are engaged in a realistic learning atmosphere. In such an authentic setting, students are highly interested since they no more need to be bored by sitting in the class to just write. This explanation is assured by Federici (2017) who asserts that in IBL, the process through which the end-product is composed is as important as the end-product itself since students write for a genuine purpose. A fourth possible explanation is the non-threatening learning setting that IBL offers. This is confirmed by many researchers (Fettahhoğlu & Aydoğan, 2020; Palupi et al., 2020).

Another probable explanation is curiosity which is boosted in IBL creating the motivational fuel needed by students to be deeply involved in complicated tasks without experiencing frustration or boredom. According to Mulyani (2017), students’ curiosity pushes students to challenge the ideas, test them, make connections and come up with innovative ways for tackling different issues. The sense of agency that students experience in IBL, is another possible explanation as well. According to Guribye et al. (2021), students begin to perceive learning as an ongoing process rather than an endpoint. A final explanation might be the nature of IBL that highlights the presence of students’ voices which the audience perceives as a convincing and credible voice since it is presented via convincing evidence from valid sources during an accurate process of inquiry. This complies with the findings of many studies (Gholam, 2019; Gladun & Buchynska, 2017; Henning, 2011).
XIII. CONCLUSION

Based on the results of the current study, the researcher concluded that the proposed ILBP was effective in teaching and developing the writing performance for first-year EFL majors. Moreover, using such an approach encourages students to collaborate supportively and manage their learning effectively. To sum up, inquiry-based learning activities prepare and equip EFL students with the skills needed to become independent, lifelong learners and influential writers.

XIV. RECOMMENDATIONS AND SUGGESTIONS

In light of the results and conclusions of the present study, the following recommendations are proposed: 1) incorporating IBL in writing instruction, 2) employing a student-centered learning process at which students are given more opportunities to participate actively and independently in their learning, 3) assigning writing topics that are of interest for students, 4) reassuring the importance of students’ participation in assessing and reflecting on their own writing performance, and 5) holding more training workshops on the new (TEFL) methods between schools and faculties of Education to keep updated regarding the newest effective trends in TEFL. Furthermore, the researcher suggests the following areas for future research: 1) further research on the impact of IBL in developing EFL majors’ creative writing, critical reading, translation, and critical oral skills is reasonably needed, 2) the impact of IBL in enhancing EFL students’ self-regulation & self-efficacy skills should receive more research efforts, 3) the impact of IBL in developing TEFL pre-masters academic writing skills can be investigated, 4) the impact of IBL in developing the teaching performance of EFL prospective teachers seems to be a promising case-study.
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